## **CONTRACT CHANGE ORDER**

Change Requested by: Engineer

CCO: 312 Suppl. No. 0 Contract No. 04 – 0120F4 Road SF-80-13.2/13.9 FED. AID LOC.:

To: AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENTURE

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract.

NOTE: This change order is not effective until approved by the Engineer.

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

## **Extra Work at Force Account:**

Furnish forty (40) 3" diameter ASTM A354 Grade BD anchor bolt assemblies in accordance with the requirements of Section 10-1.47, "SPHERICAL BUSHING BEARING (PIER E2)" and Section 10-1.50, "SHEAR KEY (PIER E2)" in the Special Provisions for testing and replacement rods in the Pier E2 Shear Keys and Bearings. In addition, the rods shall meet the following supplementary requirements, or as directed by the Engineer:

- The steel shall have Rockwell hardness limited to 31 HRC minimum and 35 HRC maximum. These measurements shall be taken at 3 mm increments from the ends and at 3 mm increments across the entire cross section of the heat treated rods.
- Hardness measurements shall be in two traverses at 90 degrees to each other and shall be taken at a minimum of one rod diameter from the end of the heat treated rods.
- The steel shall have a minimum Charpy V impact resistance of 50 ft-lb at +40 Degrees F. Follow sample level/size "B" in ASTM F1470, pull samples from 4 rods if all 40 rods are a single lot. For each sampled rod, take 1 set at the surface and 1 set at the center of the rod.
- The rods shall be MT inspected after threading and before galvanizing. The MT inspection shall include both the
  unthreaded shank and the threaded ends. The MT inspection shall be on 100% of the rods, with ASTM F788 used
  for the acceptance criteria.

Quantity details for the 40 ASTM A 354 Grade BD anchor bolt assemblies are as follows:

- Provide 5 each 22' 7.73" length rods, galvanized, with threads cut, not rolled.
- Provide 15 each 22' 2.81" length rods, 9 galvanized and 6 ungalvanized, with threads cut, not rolled. Do not tap
  the nuts oversized on the ungalvanized rods. Ship ungalvanized rods and associated nuts and washers
  immediately after fabrication and testing.
- Provide 17 each 21' 10.84" length rods, 11 galvanized and 6 ungalvanized, with threads cut, not rolled. Do not
  tap the nuts oversized on the ungalvanized rods. Ship ungalvanized rods and associated nuts and washers
  immediately after fabrication and testing.
- Provide 3 each 20' length rods, with 5' usable threads on each end and cut in half, with one half galvanized and the
  other half ungalvanized, with threads cut, not rolled. Pitch diameter requirements will not be enforced as
  acceptance requirements along the entire threaded length. Nuts and washers are not needed for these rods.

In addition, furnish two (2) 3" diameter 300 mm length ASTM A354 Grade BD anchor bolt assemblies without threads.

Provide any additional material or labor necessary to perform this work as directed by the Engineer.

## CONTRACT CHANGE ORDER

Signature

Date

CONTRACT CHANGE ORDER						Change Requested by: Engineer		
CCO:	312	Suppl. No.	0	Contract No.	04 - 0120F4	Road SF-80-13.2/13.9	FED. AID LOC.:	

Labor, equipment and material authorized by the Engineer, as necessary, will be paid in accordance with the provisions of Section 4-1.03D, "Extra Work" of the Standard Specifications and Section 5-1.24, "Force Account Payment" of the Special Provisions.

This Contract Change Order (CCO) is for procurement only and does not include any form of incorporation into the work, including but not limited to installation. A required delivery date for items in this CCO has not been established, and therefore the Contractor will not be held responsible for delivery of the items within a certain time frame, nor for any consequential impacts to the Project Schedule. The Contractor will notify Caltrans upon delivery of the materials to Pier 7 in Oakland, and will await further direction from the Engineer subsequently.

Consideration of a time adjustment will be deferred until completion of the work specified herein. Determination of a commensurate time adjustment will be made in accordance with Section 10-1.13, "PROGRESS SCHEDULE (CRITICAL PATH METHOD)" and Section 10-1.14, "TIME-RELATED OVERHEAD" of the Special Provisions, as well as Section 8-1.07, "LIQUIDATED DAMAGES", of the Standard Specifications.

	Estimated Cost: Increase 🗵 Decrease 🗌	\$200,000.00
By reason of this order the time of complet	ion will be adjusted as follows: Deferred	
Submitted by		1 1
Signature	Resident Engineer  Darryl Schram, Senior T.E.	Date 10/10/13
Approval Recommended by		
Signature	Supervising Transportation Engineer William Casey, Supervising T.E.	Date /0//0//3
Engineer Approval by		
Signature	Supervising Transportation Engineer  BOAL FOR William Casey, Supervising T.E.	Date 10/14/13
	reful consideration to the change proposed and agree, if this proposal is approved the proposed above, and perform all services necessary for the work above	
	cceptance of this order, your attention is directed to the requirements of t g a written protest within the time therein specified.	he specifications as to

BRIAN A. PETERSEN - PROJECT DIRECTOR

(Print name and title)